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Apple launches fast Windows browser

A new web browser for Windows has appeared, from none other than Apple. The company's release of a beta version of its Safari browser for Windows has opened another front in the reignited browser wars. The Mac and iPod maker claimed that PC users downloaded more than one million copies within 48 hours of availability.

The announcement came at the end of an address by Apple CEO Steve Jobs to developers. "We would love for Safari's market share to grow substantially," he said.

Jobs claimed that Windows users should try Safari because it is "the fastest browser on Windows", twice as fast as Internet Explorer and 1.6 times faster than Firefox at rendering HTML pages. He also touted its attractive interface. "We think Windows users are going to be really impressed when they see how fast and intuitive web browsing can be with Safari," said Jobs.



▲ Apple CEO Steve Jobs promises Windows users a faster online experience with the Safari web browser

Safari is already the third most popular browser in the world, with an estimated five per cent market share and an estimated 18 million users, all Mac owners. It languishes behind Microsoft's Internet Explorer, which 78 per cent of web surfers use, and Firefox, which has a market share of around 15 per cent.

So do we need another web browser, and is Apple the right company to provide one? It has already proved that it can successfully develop good, free Windows software, and around 500 million copies of Apple's free iTunes application have been downloaded, of which 90 per cent were acquired by Windows users, according to Apple. Only 100 million iPods have been sold, so many of these copies are being used by people who just like the software.

Jobs signalled that Apple intends to piggyback Safari on the back of iTunes' popularity by presenting Safari as an option to people downloading iTunes. "How are we going to distribute Safari? There are 500,000 downloads of Firefox a day. Well, turns out there are over one million downloads of iTunes a day. There have been over half a billion downloads of iTunes to Windows machines and we know how to reach these customers and we're going to do just that," he said.

Microsoft has so far retained a sanguine silence over the latest assault on Internet Explorer's dominance, but the COO of Firefox developer Mozilla, John Lilly, wasn't pleased. He picked up on a slide in Jobs' presentation that suggested the future browser market would be divided up between Internet Explorer and Safari, with no sign of Firefox.

"This worldview betrays Apple's thinking: it's out-of-date, corporate-controlled, duopoly-oriented. It's not good for the web," he wrote on his blog.

Asus announces £100 laptop

Taiwanese computer company Asus stunned visitors to Intel's Computex tech show when it announced a laptop priced at less than \$200, which is roughly £100.

Asus, which designed the EEE PC 701 notebook with Intel, initially aimed it at poorer people in developing countries – the same market that the MIT's One Laptop Per Child scheme is designed to address. However, Asus said it would also sell its laptop in richer western markets, after the interest that the EEE PC's announcement generated.

The name EEE derives from Asus's description of the laptop as being "Easy to learn, easy to use, and easy to work".

Asus's ultraportable PC has a 7in display and weighs less than 1kg. It is around 224mm wide, 165mm high and 36mm thick. The machine, which runs Linux to keep costs down, also comes with 512MB of memory, a 100Mbit/s

Ethernet port, WiFi, a 56K modem and an integrated 300K-pixel camera. Asus claims the machine has a three-hour battery life.

The Intel processor inside has not yet been revealed, although industry insiders predict it will feature Intel's Pentium M-based system on a chip codenamed Tolapai. The processor will have a clock speed of between 600MHz and 1.2GHz.

The EEE PC 701 has no optical drive and no traditional hard disk, using flash-based storage instead. The basic model has 2GB, but more expensive versions with up to 16GB of storage and a

10in display are expected to appear after the initial launch.

Asus chairman Jonney Shih says the EEE laptop will come with "an office suite that is compatible with Microsoft Office", which is quite likely to be OpenOffice.org.

At the time of writing, Asus has yet to confirm the EEE PC 701's UK price, although the company has said it hopes to make the super-cheap portable available here before the end of the year.

► Asus's £100 ultraportable PC could soon be available in rich nations as well as developing countries



PayPal and eBay upgrade security

eBay and its subsidiary PayPal have announced that US customers can purchase a \$5 (£2.50) device that makes it harder for criminals to crack their accounts.

The nature of PayPal and eBay means that both services have become prime targets for hackers who try to trick users into divulging their account details and passwords. According to PayPal, around \$35 million (£17.3m) is lost from users' accounts every year due to fraud. This is quite a chunk of the \$11 billion (£5.4bn) annual payments the services handle.

The Security Key is a small plastic device that generates unique numerical codes every 30 seconds. Users have to enter these along with their other details in order to access their PayPal and eBay accounts. The idea is that even if a user unwittingly reveals their password, their account is still inaccessible to anyone who doesn't also have the Security Key. The companies recommend that customers keep the device on a keyring and do not leave it with their PC.

The company has not fully addressed the concerns of some customers that partners or spouses could be locked out of joint accounts because only one Security Key is available per account. PayPal says it is still possible to access an account if you lose your Security Key, but that the person will have to confirm their identity and ownership of an account.



▲ This small security key could help prevent \$35 million of fraud from eBay and PayPal customers' accounts

The Security Key will enable customers to access other financial and e-commerce sites that participate in the VeriSign Identity Protection (VIP) programme.

The announcement follows other moves by PayPal and eBay to counter fraud. Both now sign all outbound email messages digitally, and they have been lobbying ISPs to block sources of phishing emails. They are also working with ISPs on a scheme to block all unsigned emails purporting to originate from either PayPal or eBay automatically. A new alert service has been launched whereby PayPal warns a prospective eBay seller if a buyer has a history of non-payment.

PayPal and eBay have extended the availability of Security Key to Germany and Australia, and other countries including the UK are expected to be covered before the end of the year.

BT admits its broadband service is slow

As most broadband users know all too well, the actual data transfer rates ADSL services provide never actually live up to those promised by their ISP. BT has taken the unusual step of acknowledging this frustrating state of affairs, admitting that its broadband service has been poor for many customers, but claiming that it was the popularity of its offering that was to blame.

"Broadband usage in the UK has been one of the great consumer technology success stories, and we are aware that this accelerating demand has meant that a few exchanges can be congested at very busy times," said the company in a statement.

However, BT promised that it was working on the problem. "The broadband team at BT Retail is working with our BT Wholesale colleagues to resolve this issue as soon as possible. In BT Retail we are currently conducting a programme that is already introducing extra bandwidth availability and we are also working with technology that further improves the way broadband traffic is managed at peak times.

"Both of these initiatives will improve your experience and if you are among the small number of broadband users that have been experiencing slower speeds through congestion you should be noticing improvements shortly, if you're not doing so already," BT said.

BT said it was also working on a programme to improve its handling of web traffic during peak times to reduce slowdowns in its service.

Remote PC repair

Intel is planning to introduce a technology that enables technicians to repair home PCs remotely over the internet, even if the computer is switched off. Intel Active Management Technology (AMT) was launched last year in the enterprise market to much acclaim, and the chip giant is in exploratory talks with ISPs and PC vendors about making the product available to consumers.

Embedding AMT chips into a PC motherboard makes it possible for a remote administrator to turn a PC on or off, rebuild a corrupted hard disk and operate the PC remotely. Even while the PC is switched off it is possible to interrogate it to determine which operating system it uses and what hardware is present, as well as finding out if the latest versions of software such as anti-virus programs are installed and working. A remote administrator can even use AMT to block incoming threats before they infect a PC.

Unlike current remote access programs, AMT does not rely on software stored on the target PC, which may have been rendered unusable by a system crash. AMT is already shipping with high-end business PCs that carry the Intel vPro branding.

While AMT has proven a hit with businesses, not everyone agrees with its introduction into the home computer market. Digital privacy advocates such as the Electronic Frontier Foundation (EFF) are concerned about how the technology could be misused by snoopers.

"It's a lot of power to give over to someone – people are storing a large portion of their lives in their computers," said EFF staff technologist Seth Schoen. "My main concern would be to make sure consumers knew who they were giving access to, and what kind of access they're giving."

Intel said that AMT can be configured so that technicians can be allowed to access only small parts of the computer's insides, and be blocked from looking at personal data.

IN BRIEF

FREE PHOTO GALLERIES AND ONLINE STORAGE

Microsoft has announced two new free services in its Windows Live line-up. Windows Live Folders and Windows Live Photo Gallery are the first of many online applications planned for this year.

Windows Live Photo Gallery is a new version of the photo application found in Windows Vista (and now available for Windows XP). It introduces some new features, such as an automatic panorama maker, as well as simplifying photo-sharing on Windows Live Spaces, Microsoft's social-networking platform. Microsoft also plans to support other photo-sharing sites such as Yahoo!'s Flickr.

Windows Live Folders will provide up to 500MB of online storage, although only in the US for now, and on a limited basis. Microsoft will monitor its usage during the test period and possibly add more.

INTEL RESURRECTS PENTIUM BRAND

Test PCs and notebooks containing processors labelled 'Pentium Dual Core' have mysteriously appeared, despite these chips not appearing on Intel's list of planned releases. The new Pentium parts are architecturally unrelated to the old Pentium and Pentium D lines, and are instead cut-down versions of the Core 2 Duo desktop chip and the old Core Duo mobile processor.

There are currently just two desktop chips: the Pentium Dual Core E2160 running at 1.8GHz and the 1.6GHz E2140. Both have an 800MHz front-side bus (FSB) and are compatible with standard 775 motherboards. The three mobile variants are the T2060 (1.6GHz), T2080 (1.73GHz) and T2130 (1.86GHz). All have a 533MHz FSB and lack the 64-bit EM64T extensions of the desktop parts.

The main reason for the low cost is that Intel has removed half of the Level 2 cache, so each of the five new chips has just 1MB.

BUILD YOUR OWN 8-BIT GAMES CONSOLE

ThinkGeek.com is selling a kit for building your own 8-bit games console, so you can relive those joyous moments spent playing ZX Spectrum and Vic 20 games. The Hydra Console Game Dev Kit includes 128KB of memory.

IN BRIEF

» AOL NEWS RELAUNCHES WITH BLOG-LIKE LOOK

Time Warner Inc has launched a test of its overhauled AOL news portal, drawing influences from the uncluttered design of popular internet blogs. The online division of the world's largest media company said it aimed to keep readers returning and to introduce a new generation of media consumers to the site by offering more interactive features such as polls and voting features. There will also be user-created news on the same page. AOL news can be found at <http://news.aol.com>.

» GOOGLE EARTH A SECURITY RISK

The mapping facilities made available by Google Earth are a security risk, according to Lt General David Deptula, The US deputy chief of staff for intelligence, surveillance and reconnaissance. He claimed that governments are trying to reduce the risks by using camouflage, although Google has cooperated in the past and masked certain potential targets with clouds or, in the case of GCHQ, a large white swirly shape. If you need a more detailed map of GCHQ, visit the intelligence centre's website, which provides an excellent one.

» 8GB WALKMAN PHONE REVEALED

Sony Ericsson has unveiled a new Walkman mobile phone that packs as much storage as a top-of-the-range iPod nano. The W960 is a 3G phone with 8GB of on-board memory for storing photos, video and MP3 or AAC music files. The Walkman player software provides 'finger touch' navigation on the 2.6in display, which doubles as a viewfinder for the 3.2-megapixel camera and as a widescreen video viewer.

The 3G phone provides both Bluetooth and WiFi for touch-controlled web browsing and music buying whenever the handset is within range of a hot spot.

» HMV TO OFFER MP3 FILES WITHOUT DRM

Music retailer HMV is to offer electronic music files free of copy protection. It plans to start the service, which will sell 328Kbit/s tracks from just 79p, in September. It will use standard MP3 files, which are compatible with all MP3 players.

NATO goes to war on hackers

Hacking has become such a serious threat to individual computer users, businesses and even entire countries that NATO leaders held a two-day meeting in Brussels to discuss the problem.

NATO's emergency meeting was prompted by a wave of denial of service attacks in May. Originating from a massive collection of compromised PCs known as a botnet, the attack nearly crippled the online government, banking, media and educational infrastructure of Estonia (see News, *Shopper*, August 2007).

At the time of the attacks, an Estonian government spokesman compared the onslaught to the country's airports being hit by missiles in "an act of war".

"If the same result is caused by computers, then how else do you describe that kind of attack?" he asked. Estonian government officials blamed the attacks on elements connected to the Russian security services.

A NATO spokesman, speaking after the meeting, stopped short of apportioning blame for the assault on Russian forces, but acknowledged the seriousness of the botnet threat to the very fabric of technologically advanced countries.

"There was sentiment round the table that urgent work is needed to enhance the ability to protect information systems of critical importance," he said. "[The attacks on Estonia] were sustained, coordinated and focused. They had clear national security and economic implications."

In the US, the FBI issued a warning that more than one million PCs around the world have been infected with malware, turning them into a vast 'zombie' army capable of crashing websites and stealing people's personal data. The warning followed several high-profile cases in which the US agency closed down criminal networks in its Operation Bot Roast programme (see 'In Brief', opposite).

Days later the Pentagon admitted that its email server had been hacked and that 1,500 email accounts had been compromised, although it denied that any contained classified military information. A Pentagon spokesman said the attacks could have originated from a number of sources, including "recreational hackers, self-styled cyber-vigilantes, various groups with nationalistic and ideological agendas, trans-national actors and nation-states".



▲ NATO met to discuss the hacking threat after online attackers nearly paralysed Estonia's key systems

UK gets its own local YouTube

Online video-sharing website YouTube has launched 10 localised versions of its service, including one each for the UK and Ireland. The localised sites include country-specific homepages that highlight content from national broadcasters, including the BBC.

While it is still possible to watch videos from all over the world on each site, YouTube says it will tailor services such as Featured Videos to reflect each country's interests and to counter criticisms that the service is too US-centric. It has also promised to provide country-specific video rankings and comments, as well as a non-English interface where appropriate.

"We want to create features unique to certain countries, so if mobile phones are particularly popular we would introduce more mobile features," said YouTube co-founder Steve Chen. "We want to create a YouTube experience that is a local experience."

While the creation of country-specific YouTube sites could be seen as merely a move to reflect its parent company Google's creation of different versions of its service for various countries, it could also be used as a way to filter sensitive content to appease national governments. YouTube has been blocked in several countries, including Brazil, Turkey, Thailand, Morocco and Iran, after authorities objected to content that was posted on the site.

YouTube co-founder Chad Hurley denied that the site would change the way it deals with challenges from governments. "At the end of the day we want to always maintain a platform that respects local laws and customs," he said.

YouTube has also launched Remixer, a primitive free online video-editing service based on Adobe Premiere Express, on its TestTube site. The beta service, which *Shopper* found intermittent and slow, follows the low-key rollout earlier this year of a similar version of Premiere Express on the Photobucket website. MTV.com has announced a similar service based on Premiere Express.

Remixer's simple drag-and-drop interface enables users to combine video clips, music and photos, adding titles, simple transitions and effects. They can then post the results on YouTube.

Bluetooth gets faster and easier

Bluetooth will get a major revamp this autumn. The short-range wireless technology is already embedded in over a billion devices, including keyboards, cameras and phones, and 13 million new devices are sold each week.

However, the technology has been criticised for high power consumption, slow transfer rates and difficulty in getting devices to talk to each other.

"The most significant challenge that Bluetooth has faced is making the technology more usable, especially when it comes to setting up connections," said ABI analyst Stuart Carlaw. For example, making a PC communicate with a mobile phone to download an address book can require up to 15 steps, including typing a code generated by the phone into the PC.

This will change, according to the Bluetooth Special Interest Group, which oversees the technology. With Bluetooth 2.1, devices can be paired in three clicks, and as data between devices is encrypted, password authentication is unnecessary.

Bluetooth 2.1 will use a fifth of the power of today's devices, thanks in part to Nokia's Wibree technology, originally developed as an alternative to Bluetooth.

Data speeds will reach a maximum 2.1Mbit/s compared with version 2.0's theoretical top speed of just over 700Kbit/s. Bluetooth 3.0 is scheduled to appear in 2008, bringing the ability to transfer data at up to 400Mbit/s.

Microsoft forced to change Vista

Intense lobbying from Google has forced Microsoft to change Windows Vista so that installing the Google Desktop program no longer slows PC performance.

The US Justice Department, which still monitors Microsoft's behaviour after the company was found guilty of illegally using its monopoly position in the PC operating system market, has told the company to make it easier for users to choose Google as their default desktop search engine.

Vista's built-in Instant Search feature enables users to search for items on their local hard disk, just as Google's free Desktop program does. Google objected to Microsoft integrating Instant Search into Vista, an action that it claimed was locking out competing search technologies.

Microsoft said it would make it easy for Vista users to make Google the default search engine in Internet Explorer's search box and promised to place links inside the Start menu to help people choose their

preferred search engine for local search. The changes will be implemented in the first Vista Service Pack, which is due to appear before the end of this year.

The settlement will also make it easier for PC manufacturers such as Dell and HP to sell machines configured with Google search technology enabled and with Vista's search disabled.

Significantly, Microsoft's changes should also end the phenomenon whereby selecting third-party search technology such as Google's noticeably slows down PC performance. This happens because, when Google Desktop is installed, it's not possible to disable Vista's own search engine. Running two indexing routines simultaneously increases processor usage.

However, this was not enough to satisfy Google. "These remedies are a step in the right direction, but they should be improved further to give consumers greater access to alternative desktop search providers," said David Drummond, Google's chief legal officer.

London is WiFi capital

London has overtaken New York in the provision of WiFi hot spots, according to a survey by security company RSA. However, the vast majority of these networks are dedicated to businesses and are not available to the general public.

The number of WiFi hot spots in London has increased dramatically, RSA found. By June 2007 there were 7,130 hot spots in the capital, compared with just 2,747 in the same period a year ago. RSA also found that the rate of WiFi growth is increasing faster in London (160 per cent) than in New York (49 per cent) and Paris

(44 per cent). New York had 6,371 hot spots and Paris just 825.

RSA said that London's "remarkable growth" in WiFi provision was "driven by business", which provided around 94 per cent of hot spots. A significant contributor was wireless network provider The Cloud's rollout in April of WiFi coverage across the whole of the City of London.

The remaining six per cent of WiFi hot spots are mostly situated in such places as cafés, airports and libraries, where they are available for everyone to use. This percentage is lower than in New



▲ London is a great place for WiFi, as long as you're a business user

York, where 15 per cent of WiFi access points are available to the public, and 11 per cent in Paris.

RSA's study also found that WiFi security has been beefed up against attack. In London 76 per cent of access points were password-protected with WEP or more advanced encryption.

Sony apologises for church brutality

Violent video games came under a new assault as first the Church of England and then Tony Blair attacked Sony over the fact that scenes from the best-selling PS3 game, *Resistance: Fall of Man*, used Manchester Cathedral as a backdrop.

The title, which was developed by Insomniac Games, is a bloodthirsty shoot-'em-up, set in an alternative history in which 1950s Britain is invaded by brutal alien invaders, known as the Chimera.

There are several scenes where gory pitched battles between the human resistance and the aliens occur against a backdrop that Sony acknowledges was based on the genuine interior of Manchester Cathedral.

Alerted by the media, the Church of England condemned Sony both for failing to ask permission to use the cathedral as a backdrop, but more importantly for depicting scenes of violence in it. The row escalated as the Bishop of Manchester, the Reverend Nigel McCulloch, appeared on ITV to condemn Sony for promoting the game. "It is well known that Manchester has a gun crime problem," he said. "For a global manufacturer to re-create one of our great cathedrals with photo-realistic quality and then encourage people to have guns battles in the building is beyond belief and highly irresponsible."

ITV also reported that senior Anglican clergy were considering taking legal action against Sony if it did not apologise and stop sales of the game. A few days later the MP for Manchester Central, Tony Lloyd, lambasted Sony during Prime Minister's Question Time. "When large organisations like Sony find their copyright has been breached, they're very quick to use the law," he said. He also criticised Sony for using images of Manchester Cathedral as "part a game which extols gun violence" and that they were "insulting to the Church of England, and people across the land".

Former Prime Minister Tony Blair replied by calling for games companies to consider "wider social responsibility as well as an interior responsibility for profits". Faced with swathes of bad publicity, Sony issued a letter of apology to the Church, although it said that it did "not accept there is any connection between contemporary issues of 21st century Manchester and a work of science fiction in which a fictitious 1950s Britain is under attack by aliens".

The Church of England accepted the apology and the game is still on the shelves of UK stores, with some outlets reporting increased sales due to all the publicity.

IN BRIEF

GOOGLE LURES COMPANIES TO GMAIL

Organisations using Google Apps Premier and Education Editions will be able to transfer their existing email archives to Gmail. Administrators can use a self-service wizard to transfer existing email data securely from an IMAP server over to users' Gmail accounts on Google Apps.

Gmail will put messages into conversation threads, display the original sender, recipient and date of messages and convert existing mail folders into labels. All these old messages will be instantly searchable.

UK BROADCASTERS PLAN WEB FREEVIEW

A joint video-on-demand download service could be available from the BBC, ITV and Channel 4, industry sources have revealed. The broadband-based service would see the major UK terrestrial broadcasters present a common face to consumers, as they already do for the Freeview free-to-air digital TV services.

Dubbed 'Project Kangaroo', it would enable users to download the programmes of their choice using the same interface. "There is still a lot to be agreed, nothing is signed yet, but they want to do what Freeview did for digital TV, but in terms of content delivered via a broadband platform," an industry source told the *Guardian*.

FBI ARRESTS THREE BOTNET OPERATORS

The FBI has revealed the first successes of a search and destroy operation against the botnets that infect millions of computers worldwide. Together with the US Department of Justice, the law enforcement agency today announced that three so-called bot-herders have been arrested as a result of Operation Bot Roast.

James C Brewer of Arlington, Texas, is alleged to have operated a botnet that infected a Chicago-area hospital and tens of thousands of computers worldwide. Jason Michael Downey of Covington, Kentucky, has been charged with using botnets to send a high volume of traffic as part of denial-of-service attacks. Finally, Robert Alan Soloway of Seattle, Washington, is alleged to have used a large botnet network to send tens of millions of unsolicited email messages to advertise his website, selling services and products.

IN BRIEF

» GOOGLE SEARCHES FOR LINUX DESKTOP

Google has released its Desktop search application for Linux. Google Desktop for Linux (beta) includes the same features as the Windows and Mac versions, such as comprehensive local indexing and Gmail and web history search.

Its Quick Search Box provides access to both web and desktop searches. Hitting the Ctrl key twice calls it up and results are displayed as the query is typed.

Users can search the full text of almost all the files on their Linux computer, including text files, PDFs, source code, HTML files, email from Thunderbird, OpenOffice.org documents, Man and Info pages, folders, images and music. The software is also capable of finding previous versions of files or recovering those that have been accidentally deleted, assuming that they haven't been overwritten in the interim.

» BLOCKBUSTER BACKS BLU-RAY

Blockbuster is to exclude HD DVD from a major expansion of its high-definition movie rental business. The world's leading video rental firm has announced that only Blu-ray discs will be available in the 1,700 stores that will be stocking HD discs for the first time.

Blockbuster's HD DVD inventory will be restricted to the 250 stores that currently offer both formats as well as its online rentals service. Matthew Smith, Blockbuster's senior vice-president of merchandising, said that in those 250 stores, Blu-ray accounted for 70 per cent of HD rentals.

» M&S TAILORS THE IPOD SUIT

Marks & Spencer is to begin selling a suit with iPod controls embedded in the jacket. The suit uses the ElekTex 'smart fabric' developed by UK company Eleksen.

The fabric provides five control buttons for an iPod hidden in a bespoke pocket in the £149 suit, which will be on sale in nine stores. There is, however, one drawback. While the controls will let you play and pause, skip back and forward and alter the volume, if you want to change the album, artist or playlist you have to revert to the iPod's click wheel.

Electricity goes wireless

The next stage of the wireless revolution could appear within five years, after scientists at MIT announced that they have found a practical way to transmit electrical power through the atmosphere.

If the MIT researchers' claims live up to their promise, notebook power cables and mobile phone chargers could soon be following the Ethernet cable as a quaint relic in old-fashioned wired homes. The MIT team has dubbed the technology 'WiTricity'.

MIT scientists have demonstrated a 60W light bulb being powered remotely from a source situated more than six feet away. Transmitting electricity through the airwaves is not new. Nikola Tesla achieved this over one hundred years ago and anyone with a fluorescent bulb can see it light up if they stand underneath a high-tension electricity pylon.

However, the MIT team said they had managed to achieve transmission of power with around 40 per cent efficiency, way above that achieved by Tesla. And unlike Tesla's achievements, power was transmitted without the source and target needing to be in the line



of sight. Even more significantly, someone standing between the devices won't get fried, which was a serious problem with Tesla's approach.

The MIT technology works by converting electricity into magnetic fields, which are transmitted with the same resonant frequency as that of the target device's receiver. MIT said it hopes to release the technology for commercial use within five years.

Stolen iPods will be deactivated

Imagine a day when your mobile phone or MP3 player cease working if they are stolen. This could become a reality following research by Apple, which has just filed a patent designed to prevent stolen music players, phones and notebooks from recharging.

The patent describes a method by which recharging is disabled unless a password is entered. In Apple's own words, "when unauthorised use of a device is suspected, a recharging mechanism (for example, recharge circuit) of the device is disabled in order to guard against extended unauthorised use of the device."

"Consequently, normal use and enjoyment of the device can be significantly reduced when the recharger is disabled. Moreover, for devices that are mainly powered by a rechargeable power supply, disabling the recharger effectively renders the device inoperable when the power of the main power supply has run out."

The patent describes a device that is able to detect when it has been moved out of its normal 'geographical boundary' or charged up by an unknown device. It would then refuse to charge unless a password is entered.

"The device can automatically detect whether it has been just connected to another component (eg, adaptor, personal computer)

that has not been authorised," the patent application continues.

However, to avoid irritating the customer, the patent describes how devices such as iPods and notebooks could be configured to recognise a range of chargers. "The invention can be implemented in numerous ways, including a method, an apparatus, a computer-readable medium, a computing device, or a signal embodied in a carrier wave."

Earlier this year the former home secretary John Reid asked makers of music players such as Apple to follow the example of mobile phone companies and start incorporating anti-theft measures in their products.

"New technology, lifestyle changes, new commodities and new gadgets mean that the criminals continually move on," he said. "If I had one piece of advice it would be to ask the manufacturers to design features which reduce crimes."



▲ Thieves will be unable to recharge stolen music players and phones, according to a new Apple patent

Scientists develop paper that talks

Scientists from Mid Sweden University have produced a 'talking paper' billboard, which responds to users touching it at various points.

The paper contains a printed circuit board that operates as a simple computer. When touched, this circuit board triggers the playback of audio files that are also stored as data in the paper and played back through embedded paper speakers.

"We combined paper with printed graphic codes and electronically conductive ink that is engineered to be sensitive to pressure. Then digital information is embedded in the paper, and when it is touched, the

information comes out via printed speakers," explained project leader Mikael Gulliksson.

Gulliksson said the technology was suitable for creating billboards that could interact with tourists as they touch different destinations on a map. "When you approach the billboard and put your hand on a postcard that shows a picture of a beach, you can hear a very brief description of that beach," he said.

Gulliksson said that the technology can be downscaled so that it could be incorporated into things such as instruction manuals or even cigarette packets to relay health messages.